



Green Power Partnership Market Observations

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<http://www.epa.gov/greenpower/>

Introduction

- **Goal of U.S. EPA's Green Power Partnership**
 - ✓ Increase demand for green power products & expand overall market
 - ✓ Lower air pollution and greenhouse gases associated with electricity consumption
- **Over 500 Green Power Partners since July 2001**
 - ✓ Partners commit to purchase green power
 - ✓ EPA provides procurement and communications assistance
- **Partner Commitments = 2 Million MWh**
 - ✓ Includes large number of significant non-residential buyers
 - ✓ **More than 73%** of Partners commitments are for new renewables



Investment in Market Data

- **Green Power Partnership invested in Partner database tool**
 - ✓ Tool has primary role to help with Partnership outreach, communications and account management of program
 - ✓ Tool has secondary role to help further grow the green power market through data, Partnership can now:
 - Analyze data about over 500 C&I purchases
 - Conduct market segmentation analysis to identify key green power purchasing sectors
 - Make observations about purchasing trends over past 4 years
 - ✓ Future plans to further distill data and disseminate results to market



"Interest in green power products is up nationwide."

- **Sharp increase in interest in all green power products, nationwide**
 - ✓ In 2001, purchasing was limited
 - Only a few large, experimental purchasers
 - Few non-purchasing organizations were aware of products
 - ✓ In 2004, purchasing is more common
 - Steady increase in # of large purchasers, including federal
 - Sharp increase in # of medium-size purchasers
 - Many more large organizations are aware of green power opportunity
- **Green power as a % of load increasing**
- **New renewable % of purchase increasing**



Partnership Growth by Year

Year	Partners	Green Power (MWh) Committed	Green Power as a % of Total Load
2001	24	310,000	3%
2002	90	560,000	4%
2003	232	1,160,000	6%
2004	500	2,000,000	10%



"An organization's size influences the magnitude & scope of its purchase."

- **Large Partners buy more in terms of MWh**
 - ✓ Large or "2% Benchmark" Partners comprise 64% of total green power commitments in Partnership
 - ✓ But, large Partners only average 7% green power
- **Small and medium Partners buy more in terms of % of total load**
 - ✓ Medium buy ~50%, and small buy ~ 100% green power
 - ✓ Medium-sized participants buy green power at similar magnitude to large-participants, in 2003:
 - 2% Partners average 17,700 MWh/year (7% of load)
 - 3% Partners average 10,772 MWh/year (26% of load)



Partner Commitments by Benchmark

Annual Electrical Load	Benchmark	Partners	Green Power (MWh)	Green Power % of Total Load	New % of Product
Over 100,000 MWh	2%	36	1,340,000	7%	65%
10,000 - 100,000 MWh	3%	76	510,000	20%	75%
1,000 – 10,000 MWh	6%	81	120,000	40%	80%
100 – 1,000 MWh	10%	117	20,000	60%	90%
Under 100 MWh	15%	190	10,000	100%	90%
	Total	500	2,000,000	10%	70%



"Partners are expanding their green power commitments over time."

- **Upsells a very positive sign for market**
- **Partners now purchase 143% of their original green power commitments**
 - ✓ Partners from 2001, now purchase **190%** of their original green power commitment
 - ✓ Almost 600,000 MWh of Partners' commitments come from later increases in purchasing
- **Reasons for Partner increases**
 - ✓ Shopping Behavior \leftrightarrow Educated Customers
 - ✓ Positive feedback and good value from initial purchases
 - ✓ Purchasing becomes linked to environmental performance objectives or sustainability goals (e.g. EO 13123)
 - ✓ EPA's Green Power Leadership Club or Awards



Partnership Commitments by Year (Upsell)

Year Joined	Number of Partners by Year	2001 Commitment	2002 Commitment	2003 Commitment	2004 Commitment	Total Current Commitment	Upsell: % Increase
2001	24	310,000	30,000	73,000	173,000	586,000	190%
2002	67		220,000	40,000	68,000	328,000	150%
2003	145			487,000	212,000	699,000	144%
2004	264				387,000	387,000	
Total	500	310,000	250,000	600,000	840,000	2,000,000	143%

"Largest Partners have some of the most significant Upsells."

- **Large Partners now purchase 160% of their original green power commitments**
 - ✓ An increase of >500,000 MWh among 36 Partners
 - ✓ For Partners that joined 3 years ago—now purchasing 200% of their original green power commitment
- **Large Partners are important**
 - ✓ Need to sell to large folks, even at small initial purchases
 - ✓ Have proven that they expand purchases as they get more value from their purchases, e.g. awards, recognition, kudos, press, etc.
 - ✓ Have proven that they buy more as they grow more familiar with procurement processes
 - ✓ Need to have products that suit unique needs



Largest Partners Show Significant Upsells

Year Joined	# of Partners	Original Commitment - Green Power MWh	Current Commitment - Green Power MWh	Upsell: % Increase
2001	9	264,000	526,000	200%
2002	10	176,000	284,000	161%
2003	11	168,000	296,000	176%
2004	6	228,000	228,000	
Total	36	836,000	1,334,000	160%



"Total electrical load is an indicator of green power product preference."

- **Type of Product/Provider**

- ✓ Large Partners buy from competitive suppliers, as well as multiple suppliers
- ✓ Medium and small Partners buy from their utilities
 - >50% of medium and small Partners purchases are from their utilities' green pricing programs
- ✓ However, use of onsite generation not necessarily influenced by size of organization
 - All Partner size groups are using some amount on onsite

- **Type of Renewable Resource**

- ✓ Large Partners often mix in biogas and biomass, apparently more price sensitive
- ✓ Medium and small Partners buy more wind
 - >60% of Small and medium Partner purchases are wind
 - Only 28% of large purchases are wind



Partners' Purchasing by Product Type

Annual Electrical Load	Benchmark	Total Green Power Purchases (MWh)	Green Marketing Products	Green Pricing Products	REC Futures	REC Products	Onsite Products	Unknown
Over 100,000 MWh	2%	1,330,000	23%	15%	0%	24%	13%	10%
10,000 - 100,000 MWh	3%	510,000	24%	17%	0%	34%	10%	4%
1,000 – 10,000 MWh	6%	120,000	8%	51%	3%	27%	3%	6%
100 – 1,000 MWh	10%	20,000	4%	54%	5%	23%	8%	2%
Under 100 MWh	15%	10,000	6%	31%	0%	7%	11%	41%
	Total	2,000,000	22%	18%	0%	27%	12%	8%

Partners' Purchasing by Resource Type

Annual Electrical Load	Benchmark	Total Green Power Purchases (MWh)	Biogas	Biomass	Geothermal	Small-Hydro	Solar	Wind
Over 100,000 MWh	2%	1,330,000	22%	16%	0%	9%	0%	25%
10,000 - 100,000 MWh	3%	510,000	17%	4%	0%	1%	2%	60%
1,000 – 10,000 MWh	6%	120,000	8%	8%	0%	1%	3%	71%
100 – 1,000 MWh	10%	20,000	11%	0%	0%	2%	4%	72%
Under 100 MWh	15%	10,000	6%	0%	1%	0%	2%	37%
	Total	2,000,000	20%	12%	0%	7%	1%	37%

"Certain sectors buy more green power"

- **Market segmentation to target sectors**

- ✓ Customer-facing and/or CSR-oriented sectors
 - Natural products companies/food sector
 - Universities and colleges
 - Tourism, travel, and outdoor companies
 - National accounts/consumer products (retail, manufacturing)
- ✓ Local and Federal governments are making significant buys

- **Important to look at number of buyers, as well as sum of total Green Power MWh**

- ✓ Some sectors have many small purchases and a few/one large ones
- ✓ Look out for marquee organizations in a sector that hasn't yet had a large buy



Commitments by Organization Type

Industry Type	Number of Partners	Sum of Green Power MWh
Government (Federal)	21	618,000
Manufacturing	34	221,000
Government (Local, Municipal)	31	230,000
Automotive	16	181,000
Education (Higher)	28	145,000
Food, Food Services	68	132,000
Retail	35	102,000

See Green Power Partner List for more details.



Market for Green Power Growing... and Changing

- **Recent changes**

- ✓ Products gaining more exposure
- ✓ Partners are getting/creating more PR for purchases
- ✓ Market awareness/sophistication on the rise
- ✓ Strong evidence of shopping behavior in the C&I market

- **Next phase**

- ✓ Beyond “early adopters” – shift in value proposition?
- ✓ Wall Street awareness of green power purchasers
- ✓ Standardizing green power as next step in corporate environmental management



EPA's Direct Outreach Efforts

- **Modified recruiting strategy to target sectors**

- ✓ Focusing effort on “consumer-facing” and CSR-oriented sectors
- ✓ Focusing on sectors with substantial multiplier potential (within corporate family or industry sector)

- **Sector strategy expansion**

- ✓ Increase penetration of targeted sectors
- ✓ Include more sectors as products mature

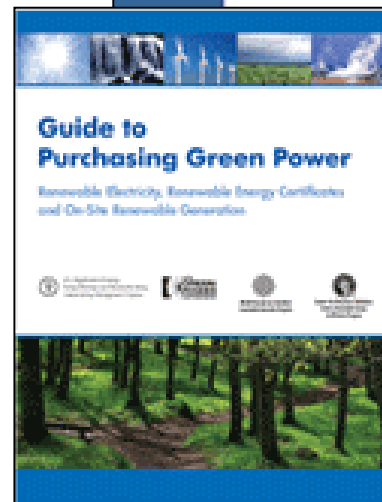
- **Sector Opportunities**

- ✓ Federal Government (FEMP)
- ✓ Local Government
- ✓ Natural products & specialty food companies
- ✓ National Accounts (inc. retail chains)
- ✓ Colleges & universities
- ✓ Green Power Communities*



Partnership Resources

- **Web site - *upgraded***
- **Partner Profiles – *All 500 Partners can have individualized profiles***
- **Green Power Locator**
- **Power Profiler**
- **Top 25 Partners List - *new***
- **Procurement Guide - *upgraded***
- **Communications Guide**
- **Green Power Partnership Planet (newsletter)**



Partner Recognition

- **Green Power Leadership Awards**
- **Partner profiles on Web site**
- **Media assistance**
- **Regional and sector-based events**
- **Sector-focused fact sheets**



EPA has worked with Higher Education Partners to highlight their leadership for specific events.



Provider's Corner

- **New Part of Green Power Partnership Web Site**

- ✓ www.epa.gov/greenpower/provider

- **Ideas for Collaboration**

1. Boost customer recognition by inviting them to join Partnership
2. Use purchasing benchmarks to increase green power purchase sizes
3. Use Green Power Partnership's resources to validate your product concept
4. Nominate customers for Green Power Leadership Awards
5. Organize additional recognition events
6. Utilize the Partnership tools to benefit green power customers
7. Stay in touch with green power trends through the Green Power Planet
8. Provide customers with ideas for marketing their green power purchases
9. Suggest a new opportunity for collaboration with U.S. EPA



Some Provider Responses

“Everybody needs to do more regarding this kind of positive reinforcement. You can’t overdo that. Credibility and recognition are the core values that EPA brings.”

“[We] mostly use it as a way to get our foot in the door, especially if the customer is clued in to the situation.”

“I use [EPA’s Green Power Partnership] as a sales tool, and I have used it as both an Upsell and a Closing tool for customers.”



Conclusion

- **EPA would like to collaborate with Providers**
 - ✓ To grow overall size of market
 - ✓ To collectively influence target sectors
 - ✓ To create additional opportunities to spotlight Partners and attract new buyers
- **Partnership will regularly share information and market observations**
 - ✓ Always looking for new opportunities to share information
 - ✓ In future, looking to find out more about why our customers are buying and feed that information back to the marketplace

